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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,753	12/14/2001	Nicholas A. Schuneman	004578.1193	2544
5073	7590	03/08/2005	EXAMINER	
BAKER BOTTS L.L.P.			CHEN, SHIH CHAO	
2001 ROSS AVENUE			ART UNIT	
SUITE 600			PAPER NUMBER	
DALLAS, TX 75201-2980			2821	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/022,753	<b>Applicant(s)</b> SCHUNEMAN ET AL.	
	<b>Examiner</b> Shih-Chao Chen	<b>Art Unit</b> 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2004.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-4 and 8-17 is/are rejected.  
 7) ☒ Claim(s) 5-7 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/15/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. The request filed on June 15, 2004 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/022,753 is acceptable and a RCE has been established. An action on the RCE follows.

### ***Claim Objections***

2. Claim 8 is objected to because of the following informalities: in lines 2-3, the term "a conductive section having a recess with a slot portion," should be changed to --a conductive section having a recess with a slot portion and a balun portion,--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (U.S. Patent No. 6,317,094).

Regarding claims 1-4 and 8-15, Wu et al. teaches in figures 23-26 an apparatus and method steps therefor, an apparatus comprising: a conductive section [304] having a recess [320] which includes a balun portion [324] and a slot portion [318], the slot portion communicating at one end with the balun portion; an elongate conductive element [314, 316] which extends generally transversely with respect to the slot portion

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in the region of the one end thereof, and which can carry an electrical signal; and further structure [308] disposed adjacent an end of the slot portion remote from the one end thereof, all arranged as claimed.

In view of the above statement, It is obvious to the skilled artisan that the second portion [324] is considered a balun portion because it transforms the unbalanced strip line conductor [308] to propagate energy to feed the balanced metal fins [314, 316]. The predetermined curve other than a first-order exponential curve.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 8-9 and 16-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5 and 12-14 of U.S. Patent No. 6,850,203. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are claiming common subject matter, as follows: a conductive section (an electrically conductive plate); a balun portion (balun hole); a slot portion (slot); said slot portion (slot) having edges on

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opposite sides thereof which each follow a predetermined curve other than a first order exponential curve; an elongate conductive element which extends generally transversely with respect to said slot portion (slot) in the region of said one end thereof; said predetermined curve for each said edge is configured to facilitate minimization of return loss for electromagnetic signals induced within said slot portion (slot) through said elongate conductive element; and including further structure (refracting layer) disposed an end of said slot portion (slot) remote from said one end thereof. The apparatus discussed above would perform the claimed method.

***Allowable Subject Matter***

6. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Chao Chen whose telephone number is (571) 272-1819. The examiner can normally be reached on Monday-Friday from 7 AM to 4:30 PM, First Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SHIH-CHAO CHEN**  
**PRIMARY EXAMINER**

*Shih-Chao Chen*  
Shih-Chao Chen  
Primary Examiner  
Art Unit 2821

SXC  
March 1, 2005